



(11) **EP 2 279 719 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
22.08.2012 Bulletin 2012/34

(51) Int Cl.:
A61G 7/057 ^(2006.01) **A47C 27/08** ^(2006.01)
A61G 7/015 ^(2006.01)

(43) Date of publication A2:
02.02.2011 Bulletin 2011/05

(21) Application number: **10075724.4**

(22) Date of filing: **02.08.2007**

(84) Designated Contracting States:
DE FR GB

(30) Priority: **04.08.2006 US 821494 P**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
07253048.8 / 1 884 224

(71) Applicant: **Hill-Rom Services, Inc.**
Wilmington, DE 19801 (US)

(72) Inventors:

- **Stacy, Richard B.**
Woodstock, GA 30188 (US)
- **Bobey, John Alan**
Daniel Island SC 29492 (US)
- **Branson, Gregory W.**
Batesville, IN 47006 (US)
- **Chambers, Kenith W.**
Batesville, IN 47006 (US)
- **Crabb, Rebecca Anne**
Harrison, OH 45030 (US)
- **Douglas, Stephen L.**
Batesville, IN 47006 (US)
- **Hakamium, Reza**
Charlestone, SC 29414 (US)
- **Hopkins-King, Rachel Elizabeth**
Harrison, OH 45030 (US)

- **Lachenbruch, Charles A.**
Lakeway, TX 78734 (US)
- **Meyer, Eric R.**
Greensburg, IN 47240 (US)
- **Mueller, Jonathan H.**
Mt. Pleasant, SC 29464 (US)
- **O'Keefe, Christopher R.**
Batesville, IN 47006 (US)
- **Soltani, Sohrab**
Charleston, SC 29403 (US)
- **Flessate, Dennis S.**
Goose Creek, SC 29445 (US)
- **Wilson, Bradley T.**
Batesville, IN 47006 (US)
- **Uzzle, Thomas**
Mt. Pleasant, SC 29466 (US)
- **Stevens, Daniel K.**
Summerville, SC 29483 (US)
- **Janoff, Karen**
Summerville, SC 29464 (US)
- **Borgman, Darrell**
Batesville, IN 47006 (US)

(74) Representative: **Findlay, Alice Rosemary**
Reddie & Grose
16 Theobalds Road
London
WC1X 8PL (GB)

(54) **Patient support**

(57) This disclosure describes a patient support (10, 900) having an air permeable layer (20, 91, 91', 920), a plurality of inflatable bladders (50, 60, 62, 64, 66, 72, 74, 74a, 74b, 76, 78, 80, 84, 86, 90, 140, 142, 960, 962, 963, 964, 965, 966, 974, 974a, 974b, 980, 984, 990, 992, 994, 996), a pressure sensing assembly (68, 70, 328, 968, 970, 1048), and a controller (42, 58, 958, 1542). In one em-

bodiment, a combination of transverse bladders (960, 962, 963) and vertically oriented can-shaped bladders (964, 965) is provided. In one embodiment, one or more angle sensors (502, 1502, 1262) are provided in articulatable sections (32, 34, 932, 934) of the patient support (10, 900).

EP 2 279 719 A3

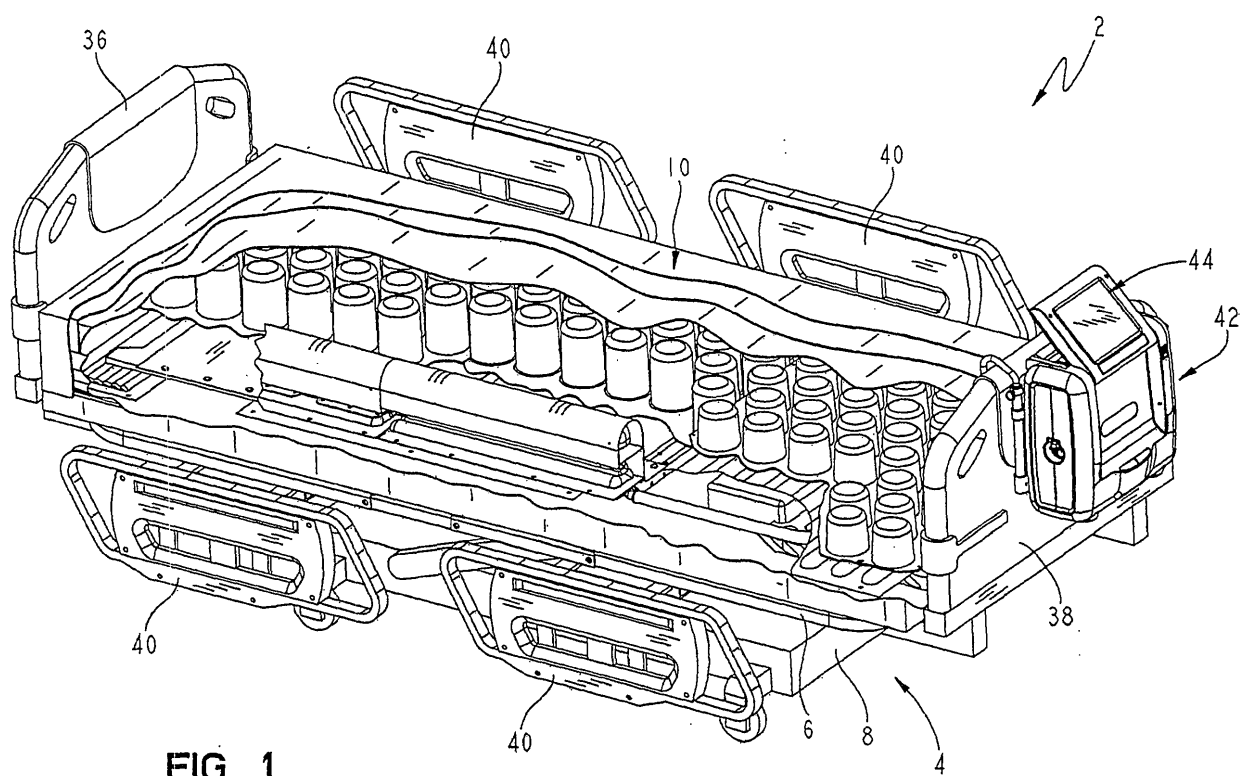


FIG. 1



EUROPEAN SEARCH REPORT

Application Number
EP 10 07 5724

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2006/112489 A1 (BOBEY JOHN A [US] ET AL) 1 June 2006 (2006-06-01) * the whole document *	1-10	INV. A61G7/057 A47C27/08 A61G7/015
A	WO 99/39613 A (HILL ROM IND SA [FR]; VIARD JEAN LOUIS [FR]; CAMUS GILLES [FR]) 12 August 1999 (1999-08-12) * abstract; figures 1,2 *	5-7	
A	EP 0 387 045 A (SSI MEDICAL SERVICES INC [US]) 12 September 1990 (1990-09-12) * page 16, lines 2-9; figure 16 * * page 16, line 38 - page 17, line 50; figure 12 *	8-10	
A	WO 2005/107674 A (HILL ROM SERVICES INC [US]; BALATON JAMES [US]; BOBEY JOHN A [US]; BRA) 17 November 2005 (2005-11-17) * page 40, last paragraph - page 41, paragraph 1; figures 1-3,23,44 *	11-15	
A	US 2006/085919 A1 (KRAMER KENNETH L [US] ET AL) 27 April 2006 (2006-04-27) * paragraphs [0056] - [0059]; figures 4,5 *	11-15	
A	EP 0 663 169 A (SPAN AMERICA MEDICAL SYST [US]) 19 July 1995 (1995-07-19) * page 8, lines 26-30; figures 1-4 *	11	TECHNICAL FIELDS SEARCHED (IPC) A61G A47C
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 16 July 2012	Examiner Birlanga Pérez, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

2

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 07 5724

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-07-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006112489 A1	01-06-2006	AT 478645 T	15-09-2010
		EP 1740143 A2	10-01-2007
		EP 2250986 A2	17-11-2010
		EP 2250987 A2	17-11-2010
		EP 2250988 A2	17-11-2010
		JP 2007535378 A	06-12-2007
		JP 2008505663 A	28-02-2008
		US 2006112489 A1	01-06-2006
		US 2007235036 A1	11-10-2007
		US 2010095462 A1	22-04-2010
		WO 2005107674 A2	17-11-2005
WO 9939613 A	12-08-1999	AT 238724 T	15-05-2003
		AU 2285199 A	23-08-1999
		BR 9907786 A	17-10-2000
		CA 2319594 A1	12-08-1999
		DE 69907416 D1	05-06-2003
		DE 69907416 T2	08-01-2004
		EP 1056372 A1	06-12-2000
		FR 2774573 A1	13-08-1999
		JP 2002501799 A	22-01-2002
		US 6094762 A	01-08-2000
		WO 9939613 A1	12-08-1999
EP 0387045 A	12-09-1990	AT 122872 T	15-06-1995
		AT 171612 T	15-10-1998
		CA 2008124 A1	09-09-1990
		DE 69019567 D1	29-06-1995
		DE 69032687 D1	05-11-1998
		DE 69032687 T2	15-04-1999
		EP 0387045 A2	12-09-1990
		EP 0630635 A2	28-12-1994
		EP 0630636 A2	28-12-1994
		EP 0635251 A2	25-01-1995
		ES 2121129 T3	16-11-1998
		HK 1009928 A1	02-06-2000
		JP 2279155 A	15-11-1990
		JP 3004304 B2	31-01-2000
		US 4949414 A	21-08-1990
WO 2005107674 A	17-11-2005	AT 478645 T	15-09-2010
		EP 1740143 A2	10-01-2007
		EP 2250986 A2	17-11-2010
		EP 2250987 A2	17-11-2010
		EP 2250988 A2	17-11-2010
		JP 2007535378 A	06-12-2007

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 07 5724

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-07-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		JP 2008505663 A	28-02-2008
		US 2006112489 A1	01-06-2006
		US 2007235036 A1	11-10-2007
		US 2010095462 A1	22-04-2010
		WO 2005107674 A2	17-11-2005

US 2006085919 A1	27-04-2006	AU 2005277535 A1	02-03-2006
		EP 1788912 A2	30-05-2007
		JP 2008509793 A	03-04-2008
		US 2006085919 A1	27-04-2006
		WO 2006023479 A2	02-03-2006

EP 0663169 A	19-07-1995	CA 2137726 A1	11-07-1995
		DE 69416995 D1	15-04-1999
		DE 69416995 T2	14-10-1999
		EP 0663169 A1	19-07-1995
		US 5487196 A	30-01-1996
